

REMARKS

Claims 1-28 are pending. Claim 22 has been amended and new claim 29 has been added. Claims 12-14 have been allowed and claims 3-6 have been objected to as being dependent on rejected base claims. The subject matter of new claim 29 is supported by Figs. 5, 7A-7C, and the description at page 18, lines 9-30 and page 20, line 19 to page 21, line 24 of the specification.

Applicants' Response to the Rejections under 35 U.S.C. §102(b)

Claim 1 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Kochis et al.* and as being anticipated by *Fuss*. Favorable reconsideration is respectfully requested.

Claim 1 includes the limitation that the shock absorbing member plastically deforms in response to an impact. The energy of the impact is absorbed by the plastic deformation. The plastic deformation in this manner may include a crash or fracture of the shock absorbing member.

Kochis et al. discloses the damping cap 18 as shown in Figs. 1 to 4. The damping cap 18 is made of elastic material (*see* column 3, lines 44-51). The damping cap 18 elastically deforms in response to the impact. *Fuss* discloses the packing unit 10, 110 as shown in Figs. 1 and 8. The packing unit 10, 110 has an enhanced resistance to permanent deformation. The packing unit 10, 110 may be made of expanded plastic material (*see* column 2, line 64 to col. 3, line 2 and column 3, lines 13-23). The packing unit 10, 110 elastically deforms in response to the impact. On the other hand, the shock absorbing member of claim 1 is designed to plastically deform in response to the impact. Neither *Kochis et al.* nor *Fuss* disclose or even suggest the plastically deforming shock

absorbing member limitation of claim 1. Hence, Applicants respectfully submit that neither reference anticipates claim 1 because they do not disclose this limitation.

Claim 2 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Kochis et al.* and *Fuss*. Claim 2 defines a shock absorbing body designed to plastically deform in response to the impact of a predetermined magnitude as the shock absorbing member of claim 1. Applicants respectfully submit that for the same reasons as described above in regard to claim 1, claim 2 likewise is not anticipated by the references.

Claim 7 stands rejected under 35 U.S.C. §102(b) as being anticipated by *von Pragenau et al.* Claim 7 defines a shock absorbing area in an enclosure in the vicinity of a pedestal. The shock absorbing area is designed to plastically deform in response to the impact of a predetermined magnitude. According to the disclosure of claim 7, when the shock absorbing area receives the impact of the predetermined magnitude, the shock absorbing area plastically deforms without inducing a plastic deformation of other areas. The impact energy is thus absorbed by the plastic deformation at the shock absorbing area. In the case where an internal component is incorporated within the enclosure, the internal component can be protected from a strong impact. The pedestal increases the probability of inducing the first collision to the shock absorbing area instead of other areas.

von Pragenau et al. discloses the damper element 34 as shown in Fig. 1. The damper element 34 may be made of neoprene or any other suitable viscous damping material (*see* column 3, lines 13-16). The damper element 34 elastically deforms in response to impact. On the other hand, the shock absorbing area of claim 7 is designed to plastically deform in response to the impact of the predetermined magnitude. Thus,

Applicants respectfully submit that *von Pragenau et al.* fails to disclose or even suggest the shock absorbing area as put forth in claim 7.

Claim 8 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Fuss* and *von Pragenau et al.* Claim 8 discloses a rigid area and a shock absorbing area. The rigid area plastically deforms in response to the impact of a first magnitude. The shock absorbing area plastically deforms in response to the impact of a second magnitude. The second magnitude is smaller than the first magnitude. According to the disclosure of claim 8, when the shock absorbing area receives the impact of the second magnitude, the shock absorbing area is forced to plastically deform without inducing a plastic deformation of the rigid area. The impact energy is thus absorbed by the plastic deformation at the shock absorbing area. In the case where an internal component is incorporated within the enclosure, the internal component is protected from a strong impact.

Neither *Fuss* nor *von Pragenau et al.* disclose or even suggest the rigid area and the shock absorbing area. Further, as discussed above in regard to claim 1 regarding *Fuss* and claim 7 regarding *von Pragenau et al.*, neither reference discloses the limitation that the device is plastically deformed in response to the impact. Hence, Applicants respectfully submit that claim 8 is not anticipated as the references fail to disclose these limitations.

Claim 10 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Ridgeway*. Claim 10 discloses a first and a second elastic member. The first elastic member is attached to the corner of the enclosure and has a rigidity of a first level. The second elastic member is layered over the outer surface of the first elastic member. The second elastic member has a rigidity of a second level that is smaller than the first level.

According to claim 10, a relatively small impact is absorbed at the second elastic member before it reaches the enclosure of an electronic apparatus. Thus, the electronic apparatus is prevented from being damaged by a light impact. When a relatively strong impact occurs, the elastic deformation of the second elastic member reaches its upper limit or threshold. The impact is then transmitted to the first elastic member. The stronger impact is absorbed at the first elastic member, and the enclosure is thus not damaged by the stronger impact. A combination of the first and second elastic members establishes a higher performance of absorbing an impact over a broader range of magnitude as compared with the case where the first and second elastic members are separately employed. Moreover, the thickness of the first and second elastic members can be reduced as compared with the case where the second elastic member is solely employed to achieve the same performance.

Ridgeway discloses the corner insert 4 as shown in Fig. 2. The corner insert 4 is a hollow frame cardboard structure. An opening 7 is covered by a pliable film 8. The pliable film 8 is made of material having high tensile strength and a slight elasticity (see column 2, lines 45-50 and lines 59-63). However, **Ridgeway** fails to disclose elastic members having different rigidities. **Ridgeway** does not disclose a rigidity relationship between two elastic members. On the other hand, claim 10 clearly defines that the rigidity level of the second elastic member is smaller than that of the first elastic member. As such, Applicants respectfully submit that **Ridgeway** does not anticipate the current invention because it does not disclose this limitation.

Claim 11 stands rejected under 35 U.S.C. §102(b) as being anticipated by **Ridgeway**. The subject matter of claim 11 is similar to that of claim 10 in that claim 11 likewise discloses a rigidity relationship between two elastic members. Hence, as

discussed above, Applicants likewise respectfully submit that claim 11 is not anticipated by *Ridgeway* because the reference does not disclose all the limitations of the claim.

Claim 15 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Kochis et al.* Claim 15 defines an elastic piece. The elastic piece is integral to an attachment member and is designed to receive an internal component. In general, an attachment member or frame is employed to support the internal component in the enclosure of the electronic apparatus. The attachment member is expected to have considerably higher rigidity than that of a shock absorbing member of an elastic material such as a resin foam. The unitary arrangement of the elastic piece and the attachment member serves to establish the rigidity of the elastic piece enough to absorb a strong impact by a relatively smaller displacement stroke or amplitude.

As described above, *Kochis et al.* discloses the damping cap 18. The damping cap 18 is disposed between the display portion 13 and the enclosure 28. The damping cap 18 is a sole element and is not integral to the attachment member. *Kochis et al.* fails to disclose or even suggest the limitation of claim 15, having “an elastic piece integral to the attachment member. . .” As such, Applicants respectfully submit that *Kochis et al.* does not anticipate the current invention because it does not disclose all the limitations of claim 15.

Claim 16 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Kochis et al.* Claim 16 defines at least a pair of elastic pieces. The pair of elastic pieces is integral to the attachment member respectively, and designed to interpose the internal component therebetween. Thus, as the above comments in regard to claim 15 discuss, *Kochis et al.* does not disclose this limitation.

The rationales of the rejection of claim 17 are not set forth. Nonetheless, Applicants respectfully submit that as with claims 15 and 16 discussed above, claim 17 likewise discloses elastic pieces not taught by *Kochis et al.*

Claim 18 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Hashimura et al.* Claim 18 defines the connecting member and the suspended member. The connecting member is stationarily supported in the inner space defined in the enclosure of the electronic device for receiving the internal component. The suspended member is connected to the connecting member and suspended in the direction of gravity in the inner space. When the internal component is set in the suspended member, the internal component is thus supported in a floating manner within the inner space. When a strong impact is applied to the enclosure from below, the impact is transmitted to the internal component suspended in the direction of gravity only via the connecting member located upward. The impact follows a longer path to reach the internal component. The longer path of the transmission allows the impact to attenuate during the transmission. The internal component can thus sufficiently be protected from an impact of this manner.

Hashimura et al. discloses a structure which supports a crystal oscillator bar 611 in a sealed container 600 as shown in Figs. 5 and 7. Four supporting pillars 640 are fixed in the sealed container 600 to surround the crystal oscillator bar 611. Four suspension wires 620 respectively connect between the four supporting pillars 640 and the crystal oscillator bar 611. Each of the suspension wires 620 has a certain resiliency by the provision of the intermediate coiled section 630 (*see* column 3, lines 50-55). The crystal oscillator bar 611 is supported by the four suspension wires 620 at the center in the sealed container 600. According to this structure, the wires 620 connected to the supporting pillars 640 should not be suspended in the direction of gravity. *Hashimura et al.* thus

fails to disclose or suggest the suspended member of claim 18 wherein the device is suspended in the direction of gravity. As such, Applicants respectfully submit that claim 18 is not anticipated by *Hashimura et al.* because it does not disclose all the limitations of the claim.

Claim 20 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Hashimura et al.* Claim 20 defines an internal component. The internal component is suspended in the direction of gravity within the inner space defined in the enclosure. As above, *Hashimura et al.* does not disclose a limitation of the claim. As such, Applicants respectfully submit that claim 20 is not anticipated by *Hashimura et al.*

Claim 21 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Holden et al.* Applicants have amended claim 21 to more distinctly claim the subject matter they regard as the invention. Amended claim 21 requires that the internal component is allowed to move in the direction tangential to at least a pair of swelling surfaces. According to the shock absorbing member of the amended claim 21, when the internal component is held between the swelling surfaces in the electronic apparatus, the internal component is supported in a floating manner between the swelling surfaces. Specifically, the movement of the internal component is restricted within a plane. If a strong impact is applied to the enclosure, the internal component moves only along the plane. The energy of the impact is transformed into kinetic energy. The impact energy is thus sufficiently consumed and the internal component is prevented from enduring the impact.

Holden et al. discloses the metal plates 24, 26, 28, 32, 34. A ceramic plate 16 is interposed between the metal plates 24 and 26 and a ceramic plate 18 is interposed between the metal plates 26 and 28. A ceramic plate 20 is interposed between the metal plates 32 and 34. However, *Holden et al.* does not disclose that the ceramic plates move

in the direction tangential to the contact area of the metal plates. Hence, Applicants respectfully submit that *Holden et al.* does not disclose or suggest the limitations of amended claim 21.

Claim 22 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Holden et al.* Claim 22 discloses the swelling surfaces cooperate to restrict movement of the internal component within a plane. Thus, as discussed above in regard to claim 21, Applicants respectfully submit that claim 22 is not anticipated by *Holden et al.* because the reference fails to disclose all of the limitations of the claim.

Claim 23 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Holden et al.* Claim 23 requires a protrusion, a receiving member and a tensioned elastic member. The protrusion is attached to one of the enclosure and the internal component. The receiving member is attached to the other of the enclosure and the internal component so as to define a void opposed to the protrusion. The tensioned elastic member extends across a space between the protrusion and the void. The elastic member is allowed to stretch as the protrusion advances into the void in the electronic apparatus. The stretch of the elastic member serves to transform any impact energy into elastic deformation. The impact energy is consumed in the elastic member. Accordingly, the internal component is sufficiently protected from a relatively small impact. When the protrusion further advances into the void, the elastic member is tightly held between the protrusion and the inside surface of the void. A compressive deformation is then induced in the elastic member, which will absorb the impact energy. The internal component can thus be protected from a relatively strong impact.

Applicants respectfully submit that *Holden et al.* does not disclose or suggest the limitations of claim 23. Specifically, *Holden et al.* does not disclose a protrusion, a

receiving member or a tensioned elastic member. Hence, Applicants respectfully submit that *Holden et al.* does not anticipate claim 23.

Claim 24 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Holden et al.* Claim 24 defines a contact member, a receiving member and a tensioned elastic member. The contact member defines a protrusion. The receiving member defines a void opposed to the protrusion. The tensioned elastic member extends across a space between the protrusion and the void. As with claim 23 above, Applicants respectfully submit that *Holden et al.* does not disclose or suggest all of the limitations of claim 24. Specifically, *Holden et al.* does not disclose a protrusion and a tensioned elastic member. Hence, Applicants respectfully submit that *Holden et al.* does not anticipate claim 24.

Claim 25 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Yoshimura*. Claim 25 discloses a reinforcing beam. The reinforcing beam extends over the bottom so as to connect opposite corners. The enclosure of the electronic apparatus defines four side walls on the periphery of a rectangular bottom plate. Four edges or ridgelines are formed at the junction of the bottom plate and the side walls. The edges serve to reinforce the rigidity of the enclosure. The combination of the edges and the reinforcing beams achieves a still increased rigidity of the enclosure. Thus, twisting of the bottom plate is effectively prevented.

Yoshimura discloses shock absorbers 1, 2, 3. The shock absorbers 1, 2, 3 do not connect opposite corners (*see* Fig. 4). Thus, *Yoshimura* fails to disclose or suggest the reinforcing beam as defined in claim 25. Applicants respectfully submit that *Yoshimura* does not anticipate claim 25 because the reference does not disclose the “connect opposite corners” limitation.

Claim 26 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Yoshimura*. As with claim 25 above, Applicants respectfully submit that claim 26 is not anticipated by *Yoshimura* because claim 26 also requires the limitation of connecting at opposite corners.

Claim 27 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Kochis et al.* Claim 27 defines a shock absorbing member fixed on the exterior of an enclosure behind a display panel module. When the exterior surface of the enclosure suffers from a strong impact, the shock absorbing member serves to sufficiently absorb the impact. The enclosure for the display panel module is thus prevented from being damaged. As such, the display panel module is reliably protected from impact.

Kochis et al. discloses a damping cap 18 disposed at the side of the display portion 13, not behind the display portion. The damping cap 18 is not fixed on the exterior of the enclosure 24, 26. Thus, *Kochis et al.* does not disclose or suggest the shock absorbing member defined in claim 27. Specifically, *Kochis et al.* does not disclose the limitation that the shock absorbing member is fixed on the exterior of the enclosure behind the display panel. Hence, Applicants respectfully submit that *Kochis et al.* does not anticipate claim 27.

Claim 28 stands rejected under 35 U.S.C. §102(b) as being anticipated by *Kochis et al.* Claim 28 requires an exterior surface which receives a shock absorbing member at the rear side of the display panel module. As with claim 27 above, Applicants respectfully submit that *Kochis et al.* does not disclose the limitation of the shock absorber being fixed to the exterior of the enclosure behind the display panel. Hence, Applicants respectfully submit that *Kochis et al.* does not anticipate claim 28.

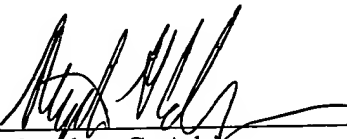
For at least the foregoing reasons, it is believed that this application is now in condition for allowance. If, for any reason, it is believed that this application is not in condition for allowance, Examiner is encouraged to contact the Applicants' undersigned attorney at the telephone number below to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

By: _____



Stephen G. Adrian
Reg. No.: 32,878
Attorney for Applicants
Tel: (202) 822-1100
Fax: (202) 822-1111

Attachments: Amendment Transmittal w/fee
Change of Correspondence Address
MJC/SGA/rer